To Wayne Hedberg
DOGM M/035/015

State of Utah

DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF WATER QUALITY

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Governor

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January 23, 1996

Michael Schwinn
U.S. Army Corps of Engineers
Utah Regulatory Office
1403 South 600 West Suite A
Bountiful, Utah 84010

Dear Mr. Schwinn:

Subject: EIS for Kennecott Tailings Modernization, Public Notice 199450301

We have reviewed the portions of the Final Environmental Impact Statement (EIS) for the Kennecott Tailings Modernization Project that evaluates surface water impacts. The Appendix E information on aquatic life and wildlife risks associated with selenium is very useful. Based on that information it appears that dissolved selenium concentrations below 0.012 mg/L in lower Lee Creek should not be a significant risk to wildlife.

However, there may be a better alternative which would reduce the risk of significant selenium concentration (over 0.100 mg/L) proposed for the West C-7 ditch. Garfield wells NEG 484 and NEG 485 listed in table 3-7 with selenium concentrations of 0.21 mg/L and 0.44 mg/L respectively are proposed in the EIS to discharge to the ditch. Other Garfield water sources are listed with Se concentrations of less than 0.020 mg/L. Table 3-5 lists the total dissolved solids (TDS) of these two wells at 4410 mg/L and 4700 mg/L. These TDS values are not significantly different than the TDS of well NEG 481 at 4640 mg/L which is currently proposed as seal water for the tailings cyclone. Wells 484 and 485 are listed at a combined flow of 1000 gpm the same as the 1000 gpm proposed to be used from well 481.

Therefore, if wells 484 and 485 were used as process water or seal water the other waters with selenium concentrations of less than 0.020 mg/L could be discharged to the ditch. At these concentrations, the water would probably not need to be piped to the freeway crossing and the ditch may not need to be sampled. This water would not significantly degrade the existing baseline average selenium concentrations of 0.015 to 0.018 mg/L listed in table 3-6. The discharge concentrations at 001 and 002 should also not significantly increase due to dilution with other process water and 80% reduction of selenium in the tailings impoundment as stated in Appendix F page 10.

We would appreciate your consideration of this alternative proposal to prevent significant selenium degradation of the west C-7 ditch. This would thus comply with the Division's Anti-degradation Maintenance of water quality regulation R317-2-3.1.

Sincerely,

Utah Water Quality Board

Don A. Ostler, P.E.
Executive Secretary

DAO:SRM:ja

cc: Elaine J. Doward-King, Ph.D., Kennecott
Terry Sadler, Salt Lake City/County Health Department
Eva Hoffman, EPA Region VIII

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